



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Jill Boyce et al.
Serial No. : 10/575,676
Filed : October 25, 2006
For : TECHNIQUE FOR BIT-ACCURATE FILM GRAIN SIMULATION
Examiner : Bhavesh M. Mehta
Art Unit : 2624

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

- ☒ 1 Pursuant to 37 CFR 1.97(b)
[within 3 months of filing or prior to 1st Office Action]
- ☐ 2 Pursuant to 37 CFR 1.97(c)
[before Final Office Action or Allowance]
- ☐ 3 Pursuant to 37 CFR 1.97(d)
[after Final Office Action or Allowance, but prior to payment of Issue Fee]

Mail Stop Amendment
Commissioner for Patents
P. O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

The following are submitted in the above-identified application in compliance with 37 CFR 1.97 & 1.98:

☒ 4 A list of documents on form PTO/SB/08a and/or PTO/SB/08b together with copies of each identified document and a translation or a concise explanation of each non-English language document is enclosed herewith.

This paper is submitted in accordance with:

- ☒ 5 37 CFR 1.97(b): [within 3 months of filing or prior to 1st Office Action]
- ☐ 6 37 CFR 1.97(c): [before Final Office Action or Allowance, whichever is earlier]; and
- ☐ (a) The required certification made in item 8(a) below; **OR**
- ☐ (b) The \$180.00 fee specified in 37 CFR 1.17(p) for submission of this Information Disclosure Statement is authorized in item 9 below.
- ☐ 7 37 CFR 1.97(d): [after Final Office Action or Allowance, but prior to payment of Issue Fee]; and
- ☐ (a) The required Certification made in item 8(a) below; **AND**
- ☐ (b) The \$180.00 fee specified in 37 CFR 1.17(p) for submission of this Information Disclosure Statement is authorized in item 9 below.

[] 8 Certification

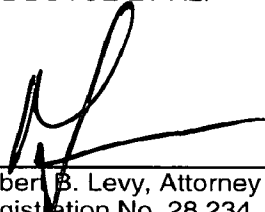
- [] (a) Each item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of this Statement; or
- [] (b) No item of information contained in this Statement was cited in a communication from a foreign patent office in a counterpart foreign application or, to the knowledge of the person signing this document after making reasonable inquiry, was known to any individual designated in 37 CFR 1.56(c) more than three (3) months prior to the filing of this Statement.

[XX] 9 Please charge the applicable fees associated with the submittal of this Information Disclosure Statement to Deposit Account No. 07-0832. An original and one (1) copy of this document is enclosed.

Respectfully submitted,

JILL BOYCE ET AL.

By:


Robert B. Levy, Attorney
Registration No. 28,234
(609) 734-6820

THOMSON Licensing LLC
Patent Operations
P.O. Box 5312
Princeton, New Jersey 08543-5312

DATE: 5/29/07

Certificate of Mailing

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in a postage paid envelope addressed to: Mail Stop Amendment, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450, on the date indicated below.

Date: May 29, 2007

Signature Lori Klewin

Lori Klewin

Customer No. 24498
Serial No.: 10/575,676



PATENT
PU030282

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Jill Boyce et al.
Serial No. : 10/575,676
Filed : October 25, 2006
For : TECHNIQUE FOR BIT-ACCURATE FILM GRAIN SIMULATION
Examiner : Bhavesh M. Mehta
Art Unit : 2624

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

- ☒ 1 Pursuant to 37 CFR 1.97(b)
[within 3 months of filing or prior to 1st Office Action]
☐ 2 Pursuant to 37 CFR 1.97(c)
[before Final Office Action or Allowance]
☐ 3 Pursuant to 37 CFR 1.97(d)
[after Final Office Action or Allowance, but prior to payment of Issue Fee]

Mail Stop Amendment
Commissioner for Patents
P. O. Box 1450
Alexandria, Virginia 22313-1450

Sir:

The following are submitted in the above-identified application in compliance with 37 CFR 1.97 & 1.98:

- ☒ 4 A list of documents on form PTO/SB/08a and/or PTO/SB/08b together with copies of each identified document and a translation or a concise explanation of each non-English language document is enclosed herewith.

This paper is submitted in accordance with:

- ☒ 5 37 CFR 1.97(b): [within 3 months of filing or prior to 1st Office Action]
☐ 6 37 CFR 1.97(c): [before Final Office Action or Allowance, whichever is earlier]; and
☐ (a) The required certification made in item 8(a) below; **OR**
☐ (b) The \$180.00 fee specified in 37 CFR 1.17(p) for submission of this Information Disclosure Statement is authorized in item 9 below.
☐ 7 37 CFR 1.97(d): [after Final Office Action or Allowance, but prior to payment of Issue Fee]; and
☐ (a) The required Certification made in item 8(a) below; **AND**
☐ (b) The \$180.00 fee specified in 37 CFR 1.17(p) for submission of this Information Disclosure Statement is authorized in item 9 below.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /M.S./

Please type a plus sign (+) inside this box → ☒

PTO/SB/08B (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/575,676
				Filing Date	10-25-2006
				First Named Inventor	BOYCE ET AL.
				Group Art Unit	2624
				Examiner Name	BHAVESH M. MEHTA
Sheet	2	of	3	Attorney Docket Number	PU030282

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials ²	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		, AL-SHAYKH ET AL, "Lossy Compression of Images Corrupted by Film Grain Noise," School of Electrical and Computer Engineering, 1996 IEEE.	
		, AL-SHAYKH ET AL, "Restoration of Lossy Compressed Noisy Images," IEEE Transactions on Image Processing, Vol. 8, No. 10, October 1999.	
		, AL-SHAYKH, "Lossy Compression of Noisy Images," IEEE Transactions on Image Processing, Vol. 7, No. 12, December 1998.	
		, BRIGHTWELL ET AL, "Automated Correction of Film Unsteadiness, Dirt and Grain," International Broadcasting Convention, September 16-20, 1994, Conference Publication No. 397, IEE, 1994.	
		, CAMPISI ET AL, "Signal-Dependent Film Grain Noise Generation Using Homomorphic Adaptive Filtering," IEE Proceedings, Image Signal Process, Vol. 147, No. 3, June 2000.	
		, ZHAO ET AL, "Constant Quality Rate Control for Streaming MPEG-4 Fgs. Video," Integrated Media Systems Center and Department of Electrical Engineering, University of Southern California, 2000 IEEE.	
		, CHAVEL ET AL, "Film Grain Noise in Partially Coherent Imaging," Optical Engineering, Vol. 19, No. 3, May-June 1980.	
		, FISCHER ET AL, "Image Sharpening Using Permutation Weighted Medians," Department of Electrical Engineering, University of Delaware, fischer@ee.udel.edu, paredesi@ee.udel.edu, arce@ee.udel.edu. 04/09/2000	
		, ILLINGWORTH ET AL, "Vision, Image and Signal Processing," The Institution of Electrical Engineers, IEE Proceedings, June 2000, Vol. 147, No. 3.	
		, MCLEAN ET AL, "Telecine Noise Reduction," XP-002285972, 2001 The Institute of Electrical Engineers.	
		, OKTEM ET AL, "Transform Domain Algorithm for Reducing Effect of Film-Grain Noise in Image Compression," Electronics Letters, October 14, 1999, Vol. 35, No. 21.	

Examiner Signature	/Max Shikhman/	Date Considered	01/15/2009
--------------------	----------------	-----------------	------------

* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /M.S./

Please type a plus sign (+) inside this box → ☒

PTO/SB/08B (10-96)
Approved for use through 10/31/99. OMB 0651-0031
Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449B/PTO INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(use as many sheets as necessary)</i>				Complete if Known	
				Application Number	10/575,676
				Filing Date	10-25-2006
				First Named Inventor	BOYCE ET AL.
				Group Art Unit	2624
				Examiner Name	BHAVESH M. MEHTA
				Attorney Docket Number	PU030282
Sheet	3	of	3		

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials [*]	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		, PENG ET AL, "Adaptive Frequency Weighting for Fine-Granularity-Scalability," Visual Communications and Image Processing 2002, Proceedings of SPIE, Vol. 4671, 2002 SPIE 0277-786X/02.	
		, PRADES-NEBOT ET AL, "Rate Control for Fully Fine-Grained Scalable Video Coders," Visual Communications and Image Processing 2002, Proceedings of SPIE, Vol. 4671 (2002), SPIE 0277-786X/02.	
		, SCHAAR ET AL, "Fine-Granularity-Scalability for Wireless Video and Scalable Storage," Visual Communications and Image Processing 2002, Proceedings of SPIE, Vol. 4671 (2002) SPIE 0277-786X/02.	
		, SHAHNAZ ET AL, "Image Compression in Signal-Dependent Noise," Applied Optics, Vol. 38, No. 26, September 10, 1999.	
		, Visual Communication and Image Processing 2002, Proceedings of the SPIE, The International Society for Optical Engineering, Vol. 4672, pt. 1-2, 2002.	
		, YAN ET AL, "Efficient Video Coding with Hybrid Spatial and Fine-Grain SNR Scalabilities," Department of Electronic Engineering, Beijing Institute of Technology, China. Jan 2002	
		, YAN ET AL, "Film Grain Noise Removal and Generation for Color Images," Department Electrical and Computer Engineers, University of Toronto, dimitris@comm.toronto.edu. 15 May 1998	
		, YAN ET AL, "Signal-Dependent Film Grain Noise Removal and Generation Based on Higher-Order Statistics," University of Toronto, Department of Electrical and Computer Engineering, dimitris@comm.toronto.edu, 1997 IEEE.	
		, YOSHIDA, "Go with the Grain, Film R&D Chief Urges, for Art's Sake," EE Times, February 07, 2005.	
		, ZHANG ET AL, "Constant Quality Constrained Rate Allocation for FGS Video Coded Bitstreams," Visual Communications and Image Processing 2002, Proceedings of SPIE, Vol. 4671 (2002) SPIE 0277-786X/02.	

Examiner Signature	/Max Shikhman/	Date Considered	01/15/2009
--------------------	----------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ Unique citation designation number. ² Applicant is to place a check mark here if English language Translation is attached.

Burden Hour Statement: This form is estimated to take 2.0 hours to complete. Time will vary depending upon the needs of the individual case. Any comments on the amount of time you are required to complete this form should be sent to the Chief Information Officer, Patent and Trademark Office, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Assistant Commissioner for Patents, Washington, DC 20231.

ALL REFERENCES CONSIDERED EXCEPT WHERE LINED THROUGH. /M.S./